DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001607 Address: 333 Burma Road **Date Inspected:** 24-Feb-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Cui Yi Ru, Zhang Zhong No **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 7 OBG:

The QA Inspector randomly observed ZPMC Welder Wang Liansheng ID Number 051356, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position, to weld stiffener piece mark X82V at Weld Joint (WJ) FB025-01-041, to Floor Beam Sub-Assembly FB025-01. The QA Inspector randomly observed ZPMC CWI Huan Wen-Pang monitoring weld parameters.

The QA Inspector randomly observed ZPMC Welder Zhang Qing Quan ID Number 044774, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F position to weld the flange to Floor Beam Diaphragm FB013-003 at WJ FB013-003-023. The QA Inspector randomly observed ZPMC CWI Zhang Zhong monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 298 amps, 30 volts with a travel speed of 432 millimeters per minute. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Welder Hong Yongli ID Number 044801, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F position to weld the flange to Floor Beam Diaphragm FB004-001 at WJ FB004-001-022. The QA Inspector randomly observed ZPMC CWI Zhang Zhong monitoring

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weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 300 amps, 30.5 volts with a travel speed of 440 millimeters per minute.

The QA Inspector randomly observed ZPMC Welder Hong Shuili ID Number 044815, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position, to tack weld various stiffeners during fit up on Floor Beam Sub-Assembly FB018-02. The QA Inspector randomly observed ZPMC CWI Cui Yi Ru monitoring weld parameters. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC Welder Liu Longxian ID Number 044786, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F position to weld the flange to Floor Beam Diaphragm FB004-004. The QA Inspector randomly observed ZPMC CWI Zhang Zhong monitoring weld parameters.

The QA Inspector randomly observed ZPMC Welder Zhang Qing Quan ID Number 044774, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F position to weld the flange to Floor Beam Diaphragm FB013-002 at Weld Joint (WJ) FB013-002-001. The QA Inspector randomly observed ZPMC CWI Zhang Zhong monitoring weld parameters.

The QA Inspector randomly observed ZPMC Welder Hong Yongli ID Number 044801, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F position to weld the flange to Floor Beam Diaphragm FB013-002 at WJ FB013-002-021. The QA Inspector randomly observed ZPMC CWI Zhang Zhong monitoring weld parameters.

The QA Inspector randomly observed ZPMC Welder Hong Shuili ID Number 044815, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position, to tack weld flange piece mark X7F, during fit up on Floor Beam Sub-Assembly FB022-01. The QA Inspector randomly observed ZPMC CWI Cui Yi Ru monitoring weld parameters.

Bay 8:

The QA Inspector randomly observed ZPMC Personnel performing heat straightening operations per ZPMC HSR1(T)-037 piece mark 18M Top p47(S), HSR1(T)-049 piece mark 47.6M Top p1424(E), HSR1(T)-043 piece mark 28M Top p778(E) and HSR1(T)-042 piece mark 46.7M BTM p632(N). The attached photograph provides additional detail.

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Summary of Conversations:

There were no relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco,Charlie	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer